

DEPARTMENT OF PERMITTING, ENVIRONMENT, AND REGULATORY AFFAIRS (PERA)

BOARD AND CODE ADMINISTRATION DIVISION

-

NOTICE OF ACCEPTANCE (NOA)

PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
T (786) 315-2590 F (786) 315-2599
www.miamidade.gov/pera/

MIAMI-DADE COUNTY

WinDoor, Inc.
7500 Amsterdam Drive
Orlando, FL 32832
SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County PERA - Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. PERA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code. This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Series "2000 180°" Clipped, Extruded Aluminum Mullion - L.M.I.

APPROVAL DOCUMENT: Drawing No. 08-00664, titled "2000 Series 180° LMI Vertical Mullion – 4'0 x 10'0 and 5'0 x 8'0 Maximum Windows", sheets 1 through 8 of 8, dated 12/18/08, with revision A dated 06/05/09, prepared by manufacturer, signed and sealed by Luis R. Lomas, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state, model/series, and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official. This NOA revises NOA # 08-0902.03 and consists of this page 1 and evidence page E-1, as well as approval document mentioned above.

The submitted documentation was reviewed by Manuel Perez, P.E.

MIAMIDADE COUNTY
APPROVED

W) 13/28/12

NOA No. 12-0130.29 Expiration Date: December 23, 2014 Approval Date: April 05, 2012 Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

- 1. Manufacturer's die drawings and sections.
- 2. Drawing No **08-00664**, Sheets 1 through 8 of 8, titled "2000 Series 180° LMI Vertical Mullion 4'0 x 10'0 and 5'0 x 8'0 Maximum Windows", dated 12/18/08, with revision A dated 06/05/09, prepared by manufacturer, signed and sealed by Luis R. Lomas, P.E.

B. TESTS

- 1. Test reports on: 1) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
 - 2) Large Missile Impact Test per FBC, TAS 201-94
 - 3) Cyclic Wind Pressure Loading per FBC, TAS 203-94 along with marked-up drawings and installation diagram of: series 1000 fixed windows w/180° aluminum impact mullion, series 2000 fixed windows w/180° mullion, series 1000/2000 fixed windows w/135° fixed mullion and series 1000/2000 fixed windows w/135° adjustable mullion, all prepared by National Certified Testing Laboratories, Test Report No. NCTL-210-3632-1, dated 08/26/09, signed and sealed by Gerard J. Ferrara, P.E. (Submitted under previous NOA#08-0902.03)

C. CALCULATIONS

- 1. Anchor verification calculations and structural analysis, complying with FBC-2007, dated 6/9/08, 04/28/09, and 10/11/09, prepared, signed and sealed by Luis R. Lomas, P.E. (Submitted under previous NOA#08-0902.03)
- 2. Glazing complies with ASTM E1300-04

D. QUALITY ASSURANCE

1. Miami-Dade Department of Permitting, Environment, and Regulatory Affairs (PERA).

E. MATERIAL CERTIFICATIONS

1. None.

F. STATEMENTS

- 1. Statement letter of conformance, complying with FBC-2010, and of no financial interest, dated January 19, 2012, signed and sealed by Luis R. Lomas, P.E.
- 2. Laboratory compliance letter for Test Report No. NCTL-210-3632-1, issued by National Certified Testing Laboratories, dated 08/26/09, signed and sealed by Gerard J. Ferrara, P.E. (Submitted under previous NOA#08-0902.03)

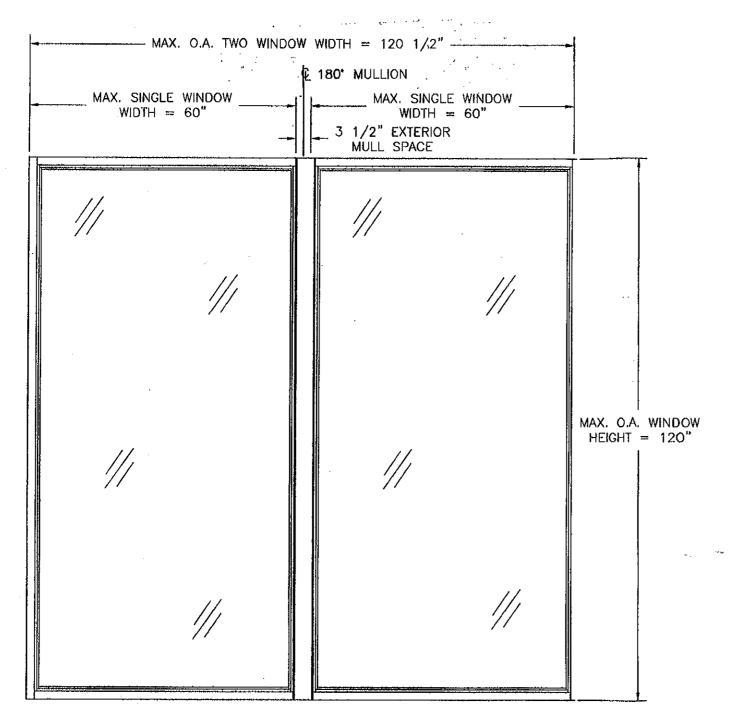
G. OTHER

1. Notice of Acceptance No. **08-0902.03**, issued to WinDoor, Inc. for their Series "2000" 180° Clipped, Extruded Aluminum Mullion – L.M.I., approved on 12/23/09 and expiring on 12/23/14.

Manuel Perez, P.E. Product Control Examiner

NOA No. 12-0130.29 Expiration Date: December 23, 2014

Approval Date: April 05, 2012



2000 SERIES LARGE MISSILE IMPACT 180° MULLION

TYPICAL ELEVATION EXTERIOR VIEW. DOUBLE SHOWN, MULTIPLES ARE APPROVED, SEE NOTE 12 SHEET 1

. 1		NATION
		TABLE OF CONTENTS PRODUCT REVISED as complying with the Florida
	SHEET NO.	DESCRIPTION Building Code 12-0130.29
	1	ELEVATION AND GENERAL NOTES Expiration Date Dec. 23, 2014
	2	BILL OF MATERIALS AND CROSS SECTION BY Manual was
	3	COMPONENTS IVII AITIN D'AIGE PTO GATE COMPONENTS
	4 - 8	INSTALLATION DETAILS AND DESIGN PRESSURE CHART

REVISIONS DESCRIPTION DATE APPROVED UPDATED PER TESTING 06/05/09 R.L.

NOTES:

- 1) THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE CURRENT FLORIDA BUILDING CODE INCLUDING THE HVHZ.
- WOOD FRAMING/2X BUCK, 16GA. STEEL STUD OR MASONRY/CONCRETE OPENING TO BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO STRUCTURE. WOOD FRAMING/2X BUCK, 16GA, STEEL STUD OR MASONRY/CONCRETE OPENING IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER OF RECORD,
- ALLOWABLE STRESS INCREASE OF 1/3 WAS NOT USED IN THE DESIGN OF THE PRODUCT SHOWN HEREIN. WIND LOAD DURATION FACTOR Cd=1.6 WAS USED FOR WOOD ANCHOR CALCULATIONS.
- MULLION MATERIAL: EXTRUDED ALUMINUM 6063-T6
- APPROVED IMPACT PROTECTIVE SYSTEM IS NOT REQUIRED FOR THIS PRODUCT IN AREAS WHERE WIND BORNE DEBRIS PROTECTION IS REQUIRED.
- DESIGN PRESSURE AND INSTALLATION DETAILS SHOWN IN THIS DOCUMENT APPLY ONLY TO THE MULLION, WINDOWS MUST BE APPROVED UNDER SEPARATE APPROVAL,
- MASONRY INSTALLATION: HIGH DESIGN PRESSURES SEE SHEET 4. LOW DESIGN PRESSURES SEE SHEET 5
- 2X BUCK/WOOD FRAMING INSTALLATION; HIGH DESIGN PRESSURES SEE SHEET 6. LOW DESIGN PRESSURES SEE SHEET 7
- 16GA. STEEL STUD FRAMING INSTALLATION; SEE SHEET 8.
- SINGLE UNITS TO BE MULLED ARE NOT LIMITED TO THOSE SHOWN IN THIS DRAWING. SINGLE UNITS TO BE MULLED TOGETHER MUST BE MANUFACTURED BY WINDOOR INC. AND MUST BE MADE OUT OF EXTRUDED ALUMINUM 6063-T6,
- DESIGN PRESSURE OF MULLED UNIT SHALL BE CONTROLLED BY THE LESSER DESIGN PRESSURE OF THE MULLION OR THE INDIVIDUAL WINDOW UNIT.
- 12) TWIN CONFIGURATION SHOWN. UNITS MAY BE MULLED TOGETHER INDEFINITELY AS LONG AS THE SINGLE UNIT WIDTH AND THE SINGLE UNIT HEIGHT ARE NOT EXCEEDED AND MULLION IS ANCHORED AS SHOWN HEREIN.
- 13) MULLION VERTICAL INSTALLATION IS SHOWN, MULLION MAY BE USED IN HORIZONTAL APPLICATIONS AS LONG AS DIMENSIONS INDICATED HEREIN ARE NOT EXCEEDED AND MULLION IS ANCHORED ACCORDING TO THIS DOCUMENT.
- INSTALLATION ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH ANCHOR MANUFACTURER'S INSTALLATION INSTRUCTIONS, AND ANCHORS SHALL NOT BE USED IN SUBSTRATES WITH STRENGTHS LESS THAN THE MINIMUM STRENGTH SPECIFIED BELOW:
 - A. WOOD MINIMUM SPECIFIC GRAVITY OF G=0.42
 - B. CONCRETE MINIMUM COMPRESSIVE STRENGTH OF 3,350 PSI.
 - C. MASONRY STRENGTH CONFORMANCE TO ASTM C-90, GRADE N, TYPE 1 (CR GREATER)
 - D. METAL STUD 16GA. .060" MINIMUM THICKNESS

INCORPORATED

Approved as complying with the Florida Building Code

WinDoor

7500 AMSTERDAM DRIVE ORLANDO, FL 32832

Phone: 407.481.8400 Fax: 407.481.0505

www.windootinc.com

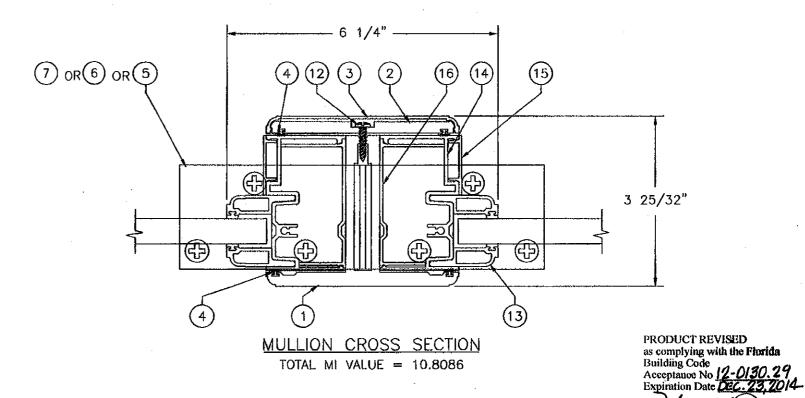
2000 SERIES 180° LMI VERTICAL MULLION 4'0 x 10'0 AND 5'0 x 8'0 MAXIMUM WINDOWS **ELEVATION AND GENERAL NOTES**

DŘAWN: DWG NO. RÉV TJH 08--00664 SCALE NTS DATE 12/18/08 SHEET 1 OF 8

LUIS R. LOMAS P.E. fiorido No. 62514

		PARTS LIST		
NO.	PART NUMBER	DESCRIPTION	MANUFACTURER	MATERIAL
1	FH-03039	2000 SERIES 180' MULLION	KEYMARK	ALUMINUM 6063-T6
2	FH-03038	2000 SERIES 180' MULLION PLATE	KEYMARK	ALUMINÚM 6063T6
3	FH-03040	2000 SERIES 180' MULLION COVER	KEYMARK	ALUMINUM 6063-T6
4		MULLION GLAZING VINYL		
5	06-09-2033	4" x 12" x 1/8" 6HOLE T-CLIP	KEYMARK	ALUMINUM 6063-T6
6	FS-03854	4" x 8" x 1/8" 6HOLE T-CLIP	KEYMĄRK	ALUMINUM 6063-T6
7	FS-03854	4" x 8" x 1/8" 4HOLE T-CLIP	KEYMARK	ALUMINUM 6063-T6
8		1/4" ELCO CRETE~FLEX	ELCO	STAINLESS STEEL
9		#14 CUT THREAD WOOD SCREW		STAINLESS STEEL
10		1/4"-14 3-POINT TEK SCREW	ITW	STAINLESS STEEL
11		#12 TEK SCREW		STAINLESS STEEL
12		#10 x 3/4" SELF TAPPING SCREW		STAINLESS STEEL
13	FH-01878	VERTICAL GLASS STOP	KEYMARK	ALUMINUM 6063-T6
14	FS-02840	FIXED WINDOW FRAME	KEYMARK	ALUMINUM 6063-T6
15	FS-0 28 49	SCREW COVER	KEYMARK	ALUMINUM 6063-T6
16	FS-02837	FLAT FILLER	KEYMARK	ALUMINUM 6063-T6

1		revisions							
	REV	DESCRIPTION	DATE	APPROVED					
	Α	UPDATED PER TESTING	06/05/09	R.L.					



WinDoor INCORPORATED

7500 AMSTERDAM DRIVE ORLANDO, FL 32832

Phone: 407.481.8400 Fax: 407.481.0505

www.windoorinc.com

2000 SERIES 180° LMI VERTICAL MULLION
4'0 × 10'0 AND 5'0 × 8'0 MAXIMUM WINDOWS
BILL OF MATERIALS, COPONENTS & CROSS SECTION

DRAWN: TJH SCALE NTS

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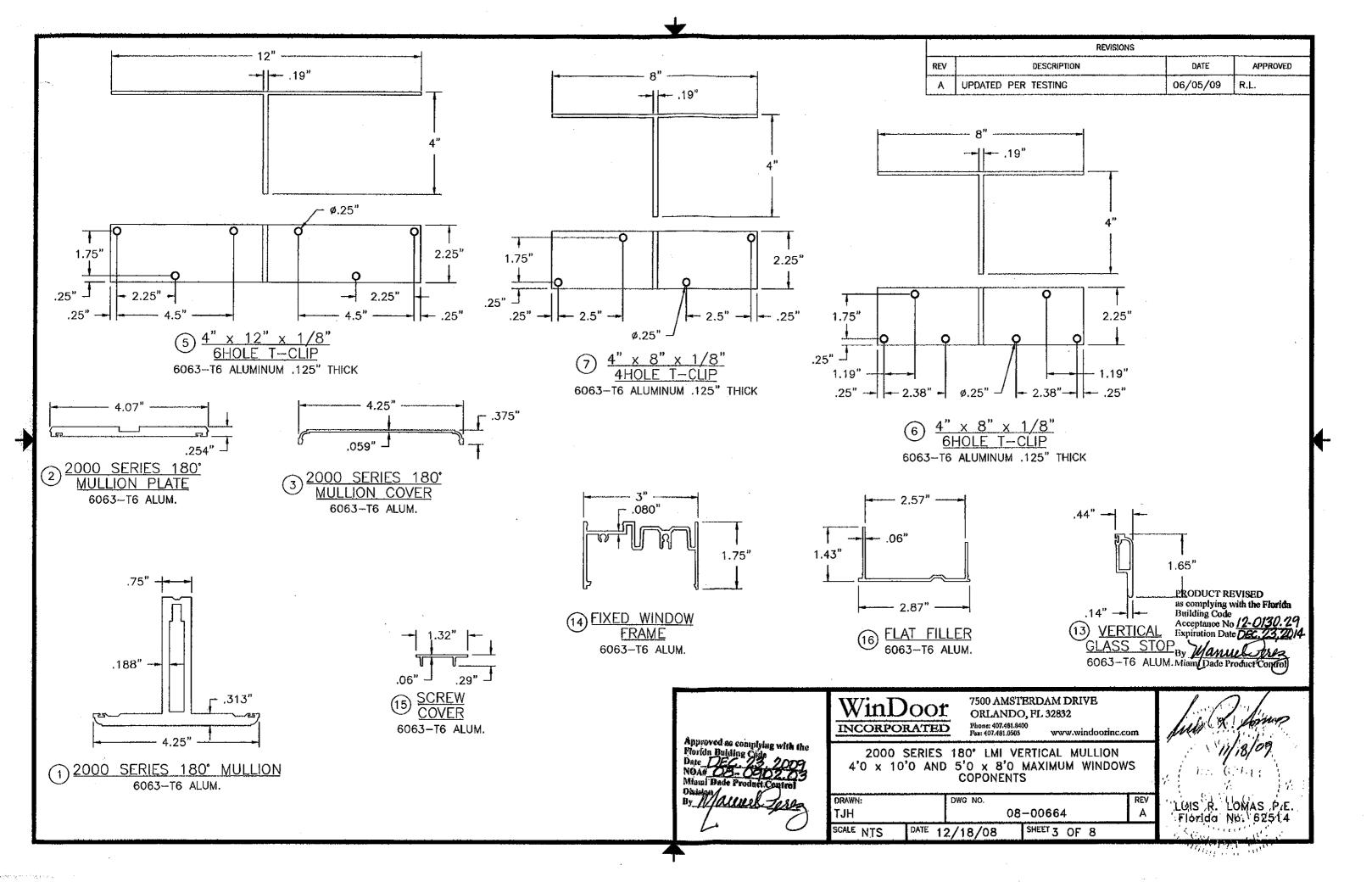
DATE 12/18/08

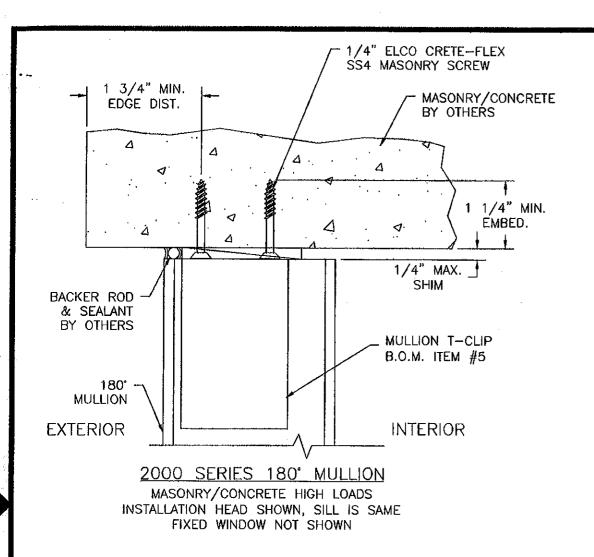
SHEET 2 OF 8

08-00664

LUIS R. LOMAS P.E. Florida No. 62514

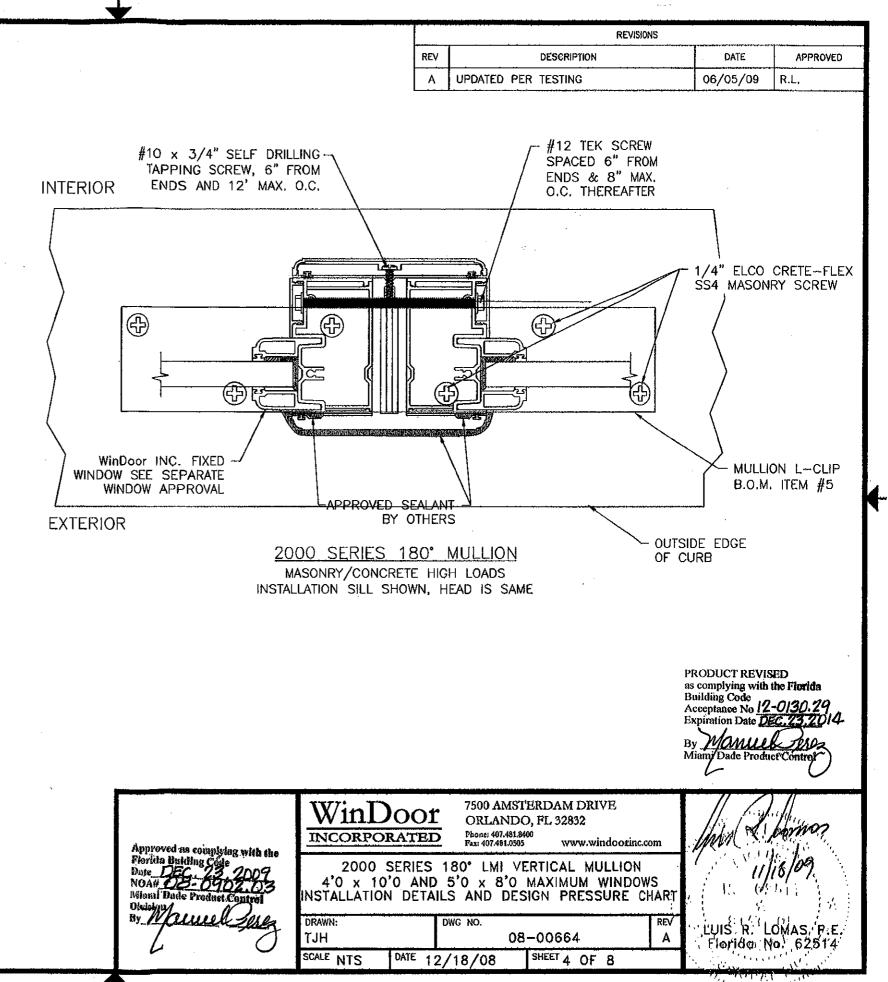
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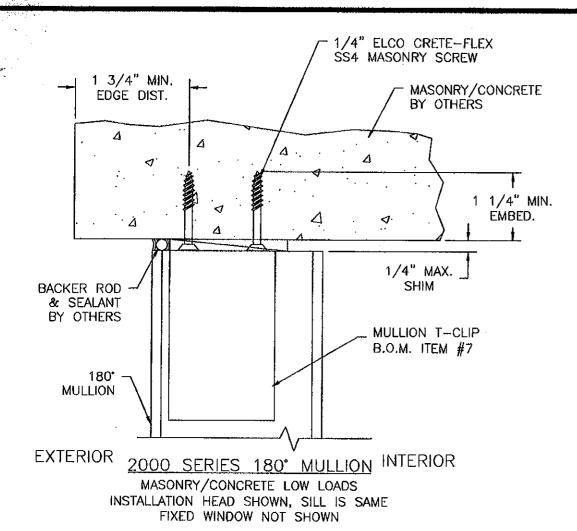




Maximum design pressure capacity chart (psf) 2000 Series FW 180° Mull Masonry Installation High Loads

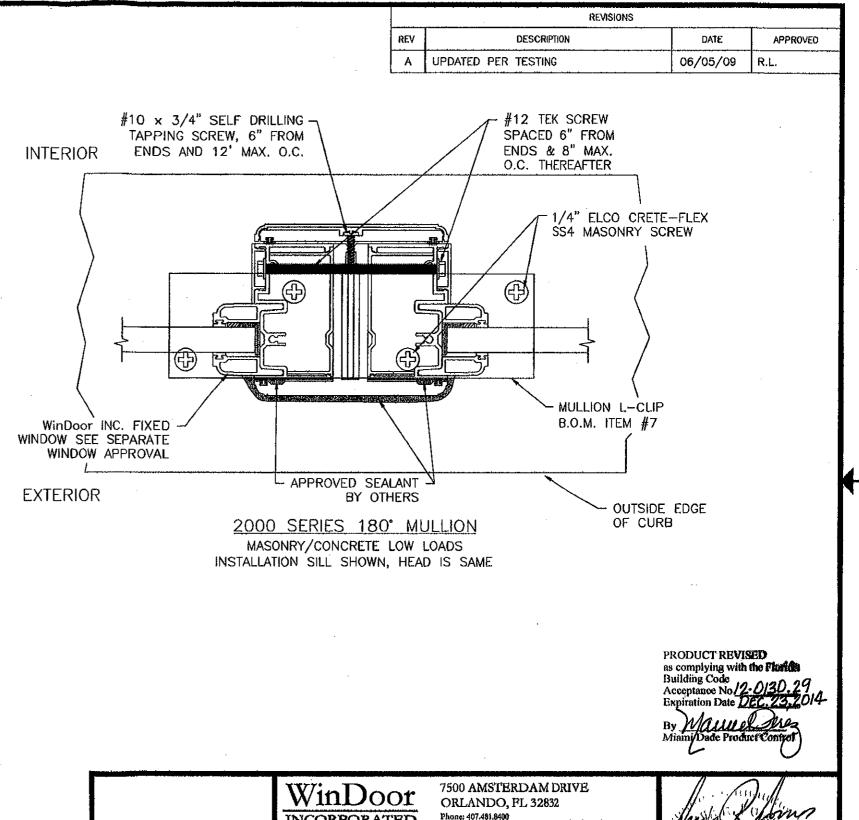
Height	Single Window Width (in)						
(in)	24.0	30.0	36.0	42.0	48.0	54.0	60.0
60.0	200	200	200	200	200	200	200
66.0	200	200	200	200	200	200	200
72.0	200	200	200	200	200	200	200
78.0	200	200	200	200	200	200	198
84.0	200	200	200	200	198	185	176
90.0	200	200	200	196	180	167	158
96.0	200	200	193	169	152	139	129
102.0	200	189	160	140	125	114	
108.0	196	159	134	117	104	-	-
114.0	166	134	113	98	88	u	-
120.0	142	115	97	84	74	_	-

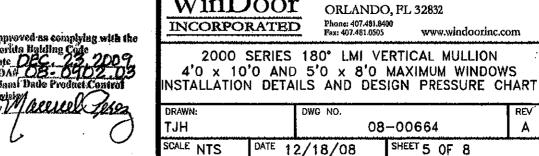




Maximum design pressure capacity chart (psf) 2000 Series FW 180° Mull Masonry Installation Low Loads

Height			Single V	/indow V	Vidth (in))	
(in)	24.0	30,0	36.0	42.0	48.0	54.0	60.0
60.0	200	200	200	200	200	200	200
66.0	200	200	200	200	188	180	176
72.0	200	200	195	177	165	156	150
78.0	200	200	176	158	146	138	132
84.0	200	183	160	143	132	123	117
90.0	200	168	146	131	120	111	105
96.0	188	156	135	120	110	102	96
102.0	176	145	125	111	101	93	-
108.0	165	136	117	104	94	+	-
114.0	155	128	110	97	88	-	-
120.0	142	115	97	84	74	=	_

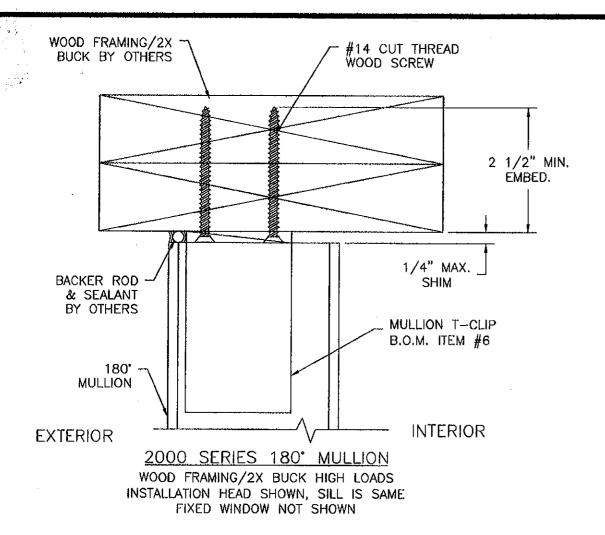




LUIS R. LOMAS P.E. Florido No. 82514

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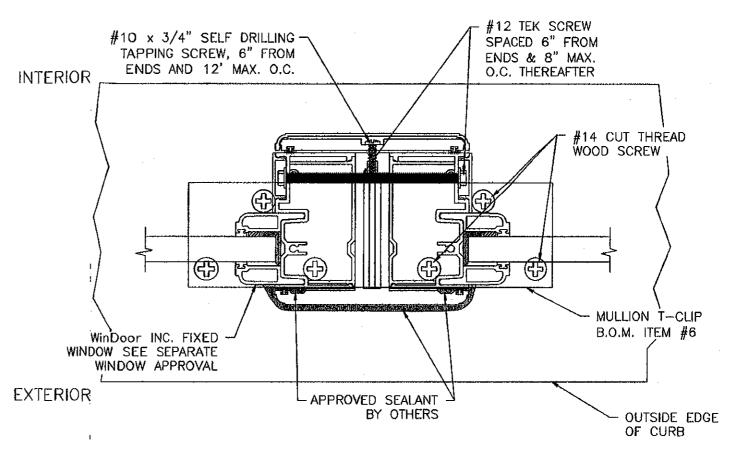
Maximum design pressure capacity chart (psf)
2000 Series FW 180° Mull Wood Framing Installation High Loads

Height		Single Window Width (in)						
(in)	24.0	30.0	36.0	42.0	48.0	54.0	60.0	
60.0	200	200	200	200	200	200	200	
66.0	200	200	200	200	200	200	200	
72.0	200	200	200	200	196	186	179	
78.0	200	200	200	189	174	164	157	
84.0	200	200	190	171	157	147	139	
90.0	200	200	174	156	142	133	125	
96.0	200	186	161	143	131	121	114	
102.0	200	173	149	133	120	111	bit	
108.0	196	159	134	117	104	-	_	
114.0	166	134	113	98	88	=		
120.0	142	115	97	84	74	-	-	

 REVISIONS

 REV
 DESCRIPTION
 DATE
 APPROVED

 A
 UPDATED PER TESTING
 06/05/09
 R.L.



2000 SERIES 180° MULLION WOOD FRAMING/2X BUCK HIGH LOADS INSTALLATION SILL SHOWN, HEAD IS SAME

PRODUCT REVISED
as complying with the Flurida
Building Code
Acceptance No 12-0130, 29
Expiration Date DEG, 23, 2014

Approved an complying with the, Florida Building Code
Bute DEC. 2009
NGAN OB-DEC.
Minus Bude Product Control
Objects
By Manual Bude Product Control

WinDoor INCORPORATED 7500 AMSTERDAM DRIVE ORLANDO, FL 32832

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407.481.8400 7.481.0505 www.windoorinc.com

2000 SERIES 180° LMI VERTICAL MULLION 4'0 x 10'0 AND 5'0 x 8'0 MAXIMUM WINDOWS NSTALLATION DETAILS AND DESIGN PRESSURE CHART

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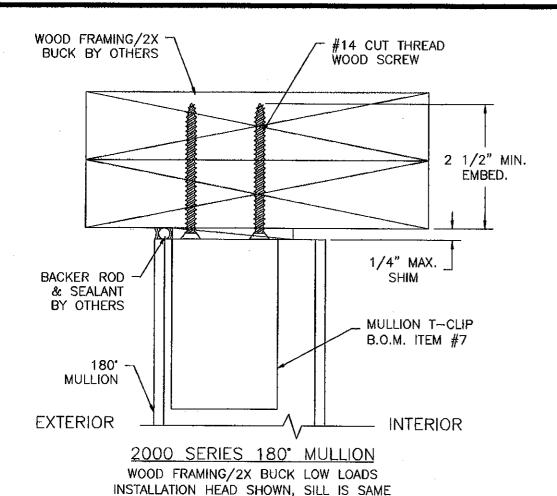
TJH 08-00664

SCALE NTS DATE 12/18/08 SHEET 6 OF 8

LUIS R. LOMAS P.E.

NS/R, LOMAS/P/E. Iorido No. 62314

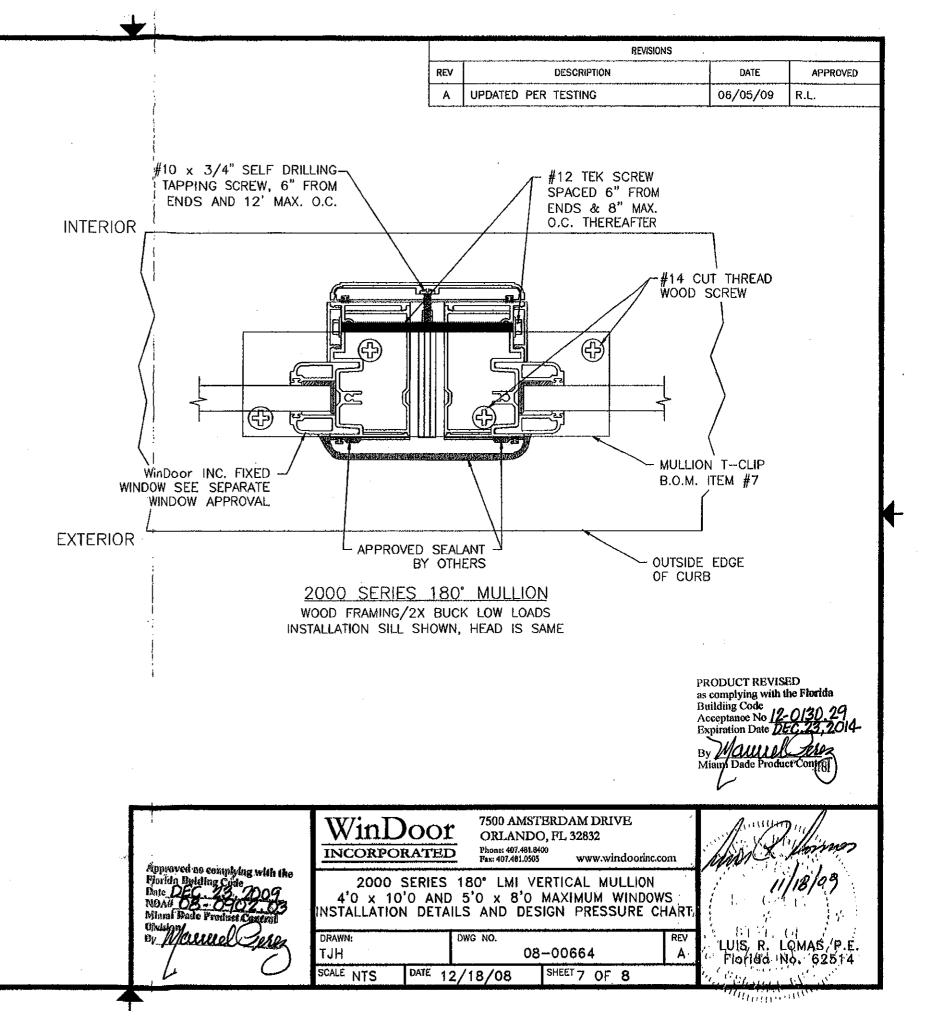
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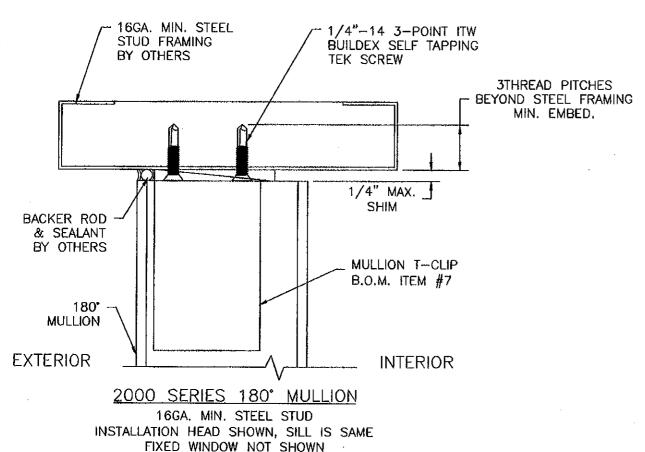


Maximum design pressure capacity chart (psf)
2000 Series FW 180° Mull Wood Framing Installation Low Loads

FIXED WINDOW NOT SHOWN

Height			Single V	indow V	Vidth (in)		· · · · · · · · · · · · · · · · · · ·
(in)	24.0	30.0	36.0	42.0	48.0	54.0	60.0
60.0	200	200	199	184	174	169	167
66.0	200	197	174	159	149	143	139
72.0	200	176	155	140	131	124	119
78.0	190	159	139	126	116	109	104
84.0	174	145	127	114	104	98	93
90.0	161	134	116	104	95	88	83
96.0	149	124	107	95	87	81	76
102.0	139	115	99	88	80	74	-
108.0	131	108	93	82	74	P4	-
114.0	123	101	87	7 7	69	<u> </u>	-
120.0	116	95	82	72	65	-	_





Maximum design pressure capacity chart (psf) 2000 Series FW 180° Mull Steel Framing Installation

Height			Single V	Vindow \	Nidth (in)		· · · · · · · · · · · · · · · · · · ·
(in)	24.0	30.0	36.0	42.0	48.0	54.0	60.0
60.0	200	200	200	200	200	200	200
66.0	200	200	200	200	200	200	200
72.0	200	200	200	200	200	200	200
78.0	200	200	200	200	200	200	200
84.0	200	200	200	200	200	196	186
90,0	200	200	200	200	187	171	160
96.0	200	200	193	169	152	139	129
102.0	200	189	160	140	125	114	_
108.0	196	159	134	117	104	-	-
114.0	166	134	113	98	88		-
120.0	142	115	97	84	74	_	_

